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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/644,042 | 08/20/2003 | Hiroshi Kajiyama | 086142-0577 | 5088 |

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| EXAMINER | |
|---|---|
| GIBSON, RANDY W | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2841 | |

DATE MAILED: 10/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/644,042 | KAJIYAMA ET AL. | |
| | Examiner | Art Unit | |
| | Randy W. Gibson | 2841 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *27 September 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1,3-10 and 17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-10 and 17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *20 August 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments filed 27 September 2006 have been fully considered but they are not persuasive. Applicant argues that none of the references show "a connector receiving portion having a fastener", a "connector attached to the connector casing" or "a connector ... adapted to removably receive an end of a cable, and having one or more terminals fitted onto the connector casing". The examiner disagrees. The features added to the claims by the recent amendment simply describe the structure of a conventional automotive wire harness, which was shown by the example of Sugiyama and used in the previous rejection.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.,* 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); and, *In re*

*Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, motive to combine the various references was clearly articulated by the examiner in the last office action.

***Claim Rejections - 35 USC § 103***

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1, 3, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takata Corporation (EP 0990565 A1) in view of Sugiyama et al (US # 4,815,984). See paragraphs 0020 & 0021. The device shown in the Takata reference differs from the claimed apparatus in that it has a cable connector (25) connected to a central plate (27) which extends between two sensor plates (26), rather that having a cable connector connected directly to each sensor plate (thus eliminating the need for cross plate 27), and there is no plug in connector for an electrical cable.

The Takata expressly state that their device is not limited to the structure shown, but may include an embodiment comprising of only two members. It seems clear that if the structure shown in Figure 3 is reduced to two members, then the cross member 27 is the one that will be eliminated (the two sensor beans 26 cannot be eliminated since the device would not be able to accurately sense weight anyone). An embodiment without the cross beam 27 would necessitate that a cable connector be attached directly to the sensor plates 26. Since Takata itself suggests such an arrangement, and since

applicant has not submitted any evidence that such an arrangement produces any unexpected result, than it would have been obvious to the ordinary practioner to modify the device of Takata by eliminating the middle plate 27 (thus saving parts) and attaching a cable connector directly to the sensor plates 26, since it has been held that a mere rearrangement of parts which does not change the operation of the device would have been obvious to the ordinary practioner. See *In re Japikse*, 181 F.2d 1019, 86 USPQ 70 (CCPA 1950) (Claims to a hydraulic power press which read on the prior art except with regard to the position of the starting switch were held unpatentable because shifting the position of the starting switch would not have modified the operation of the device.); *In re Kuhle*, 526 F.2d 553, 188 USPQ 7 (CCPA 1975) (the particular placement of a contact in a conductivity measuring device was held to be an obvious matter of design choice.); and, *MPEP* §§ 2144 & 2145. The examiner also notes that such an embodiment would have the advantage of allowing the sensor plates 26 to be individually replaceable.

Regarding the plug-in cable connector, it is clear that the connectors shown must be connected to something. If not inherently present already, then it would have been obvious to connect the strain gage sensors of Takata to a conventional automotive wire harness, as sown by the example of Sugiyama, motivated by their art recognized suitability for their intended use. See *Ryco, Inc. v. Ag-Bag Corp.*, 857 F.2d 1418, 8 USPQ2d 1323 (Fed. Cir. 1988); and, *MPEP* § 2144.07.

4. Claims 1, 3, 7, 8 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aoki (US # 6,323,444) in view of Sugiyama et al (US # 4,815,984). Aoki disclose a vehicle seat load measuring apparatus as claimed (Fig.s 3-7), except for the plug in connector for an electrical cable. However, it is clear that the connectors 1-4 shown in Figure 6 must be connected to something. If not inherently present already, then it would have been obvious to connect the strain gage sensors of Aoki to a conventional automotive wire harness, as sown by the example of Sugiyama, motivated by their art recognized suitability for their intended use. See *Ryco, Inc. v. Ag-Bag Corp.*, 857 F.2d 1418, 8 USPQ2d 1323 (Fed. Cir. 1988); and, *MPEP* § 2144.07.

5. Claims 1, 3, 7, 8-10 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aoki (US # 6,571,647) in view of Sugiyama et al (US # 4,815,984). Aoki disclose a vehicle seat load measuring apparatus as claimed (Fig.s 1-5), including the overload protection of claims 9 &10 (Col. 6, lines 52-65; Col. 11, lines 25-32), except for the plug in connector for an electrical cable. However, it is clear that the connectors 1-4 shown in Figure 4(A) must be connected to something. If not inherently present already, then it would have been obvious to connect the strain gage sensors of Aoki to a conventional automotive wire harness, as sown by the example of Sugiyama, motivated by their art recognized suitability for their intended use. See *Ryco, Inc. v. Ag-Bag Corp.*, 857 F.2d 1418, 8 USPQ2d 1323 (Fed. Cir. 1988); and, *MPEP* § 2144.07.

6. Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takata Corporation (EP 0990565 A1), as applied to claims 1, 3, & 17 above, and further in view of English et al (US # 3,949,822) or Wisniewski (US # 6,669,505). The Takata reference, as modified, discloses the claimed invention except for the protector for the connector. However, it is well known to place some type of guard over a plug to protect the leads from accidental mechanical damage when the plug is removed, and to protect the plug itself from accidental damage, as shown by the examples of English et al (Col. 3, lines 51-53) or Wisniewski (Col. 1, lines 22-36; Col. 2, lines 41-60). It would have been obvious for the ordinary practioner to place a protector of some sort over the plug of Takata reference to prevent the plug from being damaged from objects stored under the seat by the vehicle occupants.

7. Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aoki (US # 6,323,444) in view of Sugiyama et al (US # 4,815,984), as applied to claims 1, 3, 7, 8 & 17 above, and further in view of English et al (US # 3,949,822) or Wisniewski (US # 6,669,505). The Aoki combination discloses the claimed invention except for the protector for the connector. However, it is well known to place some type of guard over a plug to protect the leads from accidental mechanical damage when the plug is removed, and to protect the plug itself from accidental damage, as shown by the examples of English et al (Col. 3, lines 51-53) or Wisniewski (Col. 1, lines 22-36; Col. 2, lines 41-60). It would have been obvious for the ordinary practioner to place a protector

of some sort over the plug of Takata reference to prevent the plug from being damaged from objects stored under the seat by the vehicle occupants.

***Conclusion***

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Randy W. Gibson whose telephone number is (571) 272-2103. The examiner can normally be reached on Mon-Fri., 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tulsidas Patel can be reached on (571) 272-2098. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Randy W. Gibson
Primary Examiner
Art Unit 2841